

WHAT IS CLAIMED IS:

1. A sterilization system comprising:
a sealed sterilization container for containing items to be sterilized, the container having an inlet port and an outlet port;
5 a source of sterilizing fluid connectable to the inlet port and to the outlet port; and
wherein the inlet port and the outlet port comprise a passive microorganism impermeable closure wherein the container is sealed from microorganism ingress while disconnected from the source to maintain sterility of the items therein.
- 10 2. A sterilization system according to claim 1 wherein the passive closure mechanism comprises a covering of a vapor permeable, microorganism impermeable material.
- 15 3. A sterilization system according to claim 1 wherein the passive closure mechanism comprises a valve biased into a closed position.
4. A sterilization system according to claim 1 wherein the sterilizing fluid is a chemical vapor.
- 20 5. A sterilization system according to claim 4 wherein the sterilizing fluid is hydrogen peroxide vapor.
6. A sterilization system according to claim 1 and further comprising a pressure differential between the inlet and outlet ports to create a flow of the sterilizing
25 fluid through the container.
7. A sterilization system according to claim 6 and further comprising a fan for inducing a pressure differential between the inlet and outlet ports.
- 30 8. A sterilization system according to claim 1 and further comprising one or more baffles to lengthen a flow path between the inlet port and the exit port.

9. A method of sterilizing items comprising the steps of:

placing the items into a sealed sterilization container;

connecting a source of sterilizing fluid to the container;

flowing sterilizing fluid into the container to sterilize the items;

5 disconnecting the container from the source of sterilizing fluid; and

sealing the container from microorganism ingress whereby to maintain sterility of the items therein.

10 10. A method according to claim 9 wherein the step of sealing the container comprises having a port thereon, which is connectable to the source of sterilizing fluid, sealed with a microorganism impermeable, vapor permeable material.

15 11. A method according to claim 10 wherein the step of sealing the container comprises automatically closing a valve prior to disconnecting the container from the source of sterilizing fluid, the valve closing a port on the container which is connectable to the source of sterilizing fluid.

20 12. A method according to claim 9 wherein the sterilizing fluid is a chemical vapor.

13. A method according to claim 12 wherein the sterilizing fluid is hydrogen peroxide vapor.

25 14. A method according to claim 9 wherein the container has a second port and comprising the step of flowing the sterilizing fluid from the port to the second port through the container.

30 15. A method according to claim 14 and comprising the step of creating a continuous flow from the source of sterilizing fluid into the container through the port, out of the container through the second port and back to the source.

16. A method according to claim 15 and further comprising the step of inducing the flow with a fan within the source.

16. A method according to claim 15 and further comprising the step of inducing the flow with a fan within the source.